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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RICHARD K. MAGNUSON

Appeal 2015-004702
Application 13/343,775
Technology Center 3600

Before: MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and MICHAEL W. KIM, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Appellant seeks our review under 35 U.S.C. § 134 from the Examiner's final rejection of claims 26–54. We AFFIRM.

[1] Appellant identifies CA, Inc. as the real party in interest. (Appeal Br. 3).

THE CLAIMED INVENTION

Appellant's claims relate generally "to service level agreements." (Spec. 1, ll. 13–14). Claim 26 is illustrative of the claimed subject matter:

> 26. A method, comprising:
>
> accessing a ticket object associated with a database, the ticket object comprising a plurality of ticket attributes;
>
> determining, by a processor, a plurality of support level agreements (SLAs) that correspond to the ticket object based on one or more of the ticket attributes, at least one of the plurality of SLAs determined according to steps that include:
>
> determining a service contract object for an organization affected by the ticket object;
>
> determining an attribute map associated with the service contract object, the attribute map comprising one or more reference attributes and a mapped SLA;
>
> determining that the ticket object relates to the service contract object based on correlating one of the ticket attributes of the ticket object to one of the reference attributes of the attribute map associated with the service contract object; and
>
> generating an attached SLA object that identifies the mapped SLA as one of the plurality of SLAs that corresponds to the ticket object, the attached SLA object generated in response to determining that the ticket object relates to the service contract object;
>
> wherein the plurality of SLAs comprise a first SLA that has been customized for a first client and a second SLA that has been customized for a second client; and
>
> further comprising:
>
> determining a shared reference of the ticket object, the shared reference indicating a priority level applicable to both the first SLA and the second SLA;
>
> determining a first action that the first SLA defines for handling the priority level of the ticket object;
>
> determining a second action that the second SLA defines for handling the priority level of the ticket object, wherein the second SLA handles the priority level differently than the first SLA; and

communicating the first action and the second action.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims is:

Yehia et al. ("Yehia")	US 2002/0147726 A1	Oct. 10, 2002
Chen	US 2004/0024767 A1	Feb. 5, 2004
Steele et al. ("Steele")	US 2004/0174823 A1	Sept. 9, 2004
Childress et al. ("Childress")	US 2004/0210889 A1	Oct. 21, 2004
Clymer et al. ("Clymer")	US 2005/0005271 A1	Jan. 6, 2005
Barkan et al. ("Barkan")	US 6,925,493 B1	Aug. 2, 2005

REJECTIONS

The following rejections are before us for review.

The Examiner rejected claims 26–54 under 35 U.S.C. § 101 as reciting ineligible subject matter.

The Examiner rejected claims 26–28, 33–35, 38–40, 45–48, 53, and 54 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chen, Childress, and Barkan.

The Examiner rejected claims 29, 41, and 49 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chen, Childress, Barkan, and Yehia.

The Examiner rejected claims 30, 42, and 50 rejected under 35 U.S.C. § 103(a) as unpatentable over Chen, Childress, Barkan, and Steele.

The Examiner rejected claims 31, 32, 36, 37, 43, 51, and 52 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chen, Childress, Barkan, and Clymer.

FINDINGS OF FACT

We find the following facts by a preponderance of the evidence.

1. The Specification does not define or describe the term "database."
2. The ordinary and customary meaning of "database" is "any large store of information." (*Collins English Dictionary – Complete and Unabridged, 12th Edition 2014*. (1991, 1994, 1998, 2000, 2003, 2006, 2007, 2009, 2011, 2014), last retrieved January 31 2017 from http://www.thefreedictionary.com/database).
3. The Specification describes "objects" as a way to organize a data model, in that a "data model is a way of organizing data relating to SLAs and SLA rules so that the SLA rules may be applied to each ticket. Within the data model, each SLA may occupy a data object." (Spec. 5, ll. 24–26).
4. The Specification does not define, or limit data elements that are part of, an SLA ("support level agreement"), but describes by example that an SLA "may be attached to a ticket by maintaining Attached_SLA data objects that establish each attachment." (Spec. 8, ll. 25–26).
5. The Specification does not define, or limit data elements that are part of, and "attribute map," but describes by example that an "attribute map may be an object that associates a shared ticket reference object, for example priority, and a private SLA_Template." (Spec. 9, ll. 26–27).

6. Appellant's Figure 7 provides an example template for an "attribute map," as shown below:

Attribute_Map		
Attribute Name	**Data Type**	**Notes**
id	integer	Unique identifier/primary key
contract	Service_Contract	Reference to a Service_Contract
ref_attr_id	integer	Id of a ticket reference object, for example, priority. In terms of a relational DBMS, this may be a foreign key
mapped_SLA	SLA_Template	SLA mapped to the ticket reference object

Figure 7 discloses an example template for an "attribute map," showing a definition of data elements.

7. The Specification does not define, or limit data elements that are part of, an "attached SLA object," but describes by example that "Attached SLA data objects may adhere to an Attached_SLA template." (Spec. 8, ll. 26–27).

8. Appellant's Figure 5 below provides an example template for an "attached SLA object:"

Attached_SLA		
Attribute Name	**Data Type**	**Notes**
id	integer	Unique identifier/primary key
ticket	ticket	Reference to a ticket
sla	SLA_Template	Reference to an SLA_Template object
time_to_violation	date	Set by the TTV; indicates when the SLA will enter violations (this field may be removed if the fire time of the SLA_Rule that will set the violation is easily accessible)
sla_status	integer	Flag to indicate the violation status of the SLA represented

Figure 5 discloses an example template for an "attached SLA object," showing a definition of data elements.

9. The Specification describes a ticket object as data representing a reported trouble. (Spec. 5, ll. 17–21).

10. The Specification does not define or limit the data elements that are part of a "service contract object," but describes by example that it "may be used to represent the collection of SLAs associated with each organization object." (Spec. 11, ll. 11–13).
11. Chen discloses the use of an information database, such as using SQL technology, where an exemplary database "demonstrates the relationships between customers, business services, service level agreements and support level objectives." (Chen ¶ 17).
12. Childress discloses "[f]ollowing identification of the affected applications and customers, and the extraction of the preferred corrective action for each customer, a customer action database (28) is queried (27) based upon these factors to determine exactly what actions to take." (Childress ¶ 27).
13. Childress discloses communicating an action by "sending a notification email to a designated contact." (Childress ¶ 29).
14. The Specification describes that "the present disclosure is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents which operate in ·a similar manner." (Spec. 5, ll. 9–12).
15. Chen discloses generating an attached SLA object, stating:

> CMA allows users to modify the content of a message by allowing supplemental fields to be added with additional content. OVO's message stream interface (MSI) can be used to set CMA attributes for potential impacted services to generate an OVO MSI message that has been enriched or otherwise modified with computer service information.

(Chen ¶ 27).

16. Appellant describes a shared reference as a field containing data, stating "Tickets affecting different clients may have a shared reference field. For example, a 'high priority' field may be shared by client ABC and client XYZ." (Appeal Br. 5).
17. The Specification also describes a shared reference field as a data field, which could contain data having matching values, in that "[a]ttribute maps may allow for defining different SLA behavior for tickets with shared reference fields. For example, 'high priority' tickets for client ABC will employ different SLA rules than 'high priority' tickets for client XYZ." (Spec. 9, ll. 27–30).
18. Childress discloses stored data fields about trouble tickets, in a "Service Level Agreement (SLA) database that contains information (e.g. rules) regarding each customer's response requirements, and the business logic to appropriately respond to each condition or fault according to these rules." (Childress ¶ 20).
19. Childress discloses data indicating priority, in an example where "Customer A may receive an email if a disk drive has reached 90%, while Customer B, whose application shares use of the same disk drive, may get a higher-priority trouble ticket." (*Id.*).

ANALYSIS

Rejection under 35 U.S.C. § 101

Appellant argues the claims recite a "particular method" reciting "significantly more" than the steps summarized by the Examiner, which steps handle a trouble ticket in a "particular way," and, therefore, go "beyond the mere concept of 'determining an action to handle a trouble

ticket.'" (Reply Br. 3, 4). Appellant additionally argues the claims do not "monopolize the basic tool for determining an action to handle a trouble ticket," and "pre-empt the handling of trouble tickets." (*Id.* at 4).

We are not persuaded by Appellant's arguments.

The Supreme Court in *Alice* reiterated the two-step framework, set forth previously in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 1300 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l,* 134 S.Ct. 2347, 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If so, the second step is to consider the elements of the claims "individually and 'as an ordered combination"' to determine whether the additional elements "'transform the nature of the claim' into a patent-eligible application." *Id.* (*citing Mayo,* 132 S.Ct. at 1291, 1297). In other words, the second step is to "search for an 'inventive concept'--*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Id.* (*citing Mayo*, 132 S.Ct. at 1294).

Independent claim 26 is directed to a method that receives data, performs several "determining" steps involving received and previously stored data, then generates output that is communicated. All of the claimed steps can be performed by mental thought, with a pen and paper for communicating information, by a human. For example, the determining a plurality of support level agreements that correspond to a reported ticket can by done by visually comparing information in agreements with the ticket and

mentally determining a correlation. The other determining steps also can be performed by mental thought and simple comparison and mental deductions. The generating step can be done by handwriting data that corresponds to determinations arrived at mentally. The obtaining and communicating steps can be done by reading and writing or talking, and as input/output steps represent merely insignificant extra-solution activity.

The claims merely recite an abstract idea, because a specialized machine would not be necessary to perform the steps of the claim, outside of the single recited requirement that the determining is "by a processor."

The Federal Circuit has held that if a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent-eligible under § 101. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) ("[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101."). Additionally, mental processes, *e.g.*, deriving a task dependency model, applying business processes, managing communication, and determining the reorganization is complete, as recited in claim 1, remain unpatentable even when automated to reduce the burden on the user of what once could have been done with pen and paper. *CyberSource Corp.* 654 F.3d at 1375 ("That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*, [409 U.S. 63 (1972)].").

Turning to the second step of the *Alice* analysis, because we find that claim 26 is directed to an abstract idea, the claim must include an "inventive concept" in order to be patent-eligible, *i.e.*, there must be an element or

combination of elements that is sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself. The claims, at best, utilize "a processor," *i.e.*, a generic computer component, which does not satisfy the inventive concept. *See generally* Spec. 16, ll. 5–26 (cited at Appeal Br. 7). The claims also recite an "object associated with a database." The term "database" is not defined or described by Appellant's Specification, so we rely on the ordinary and customary meaning of "database" as "any large store of information." (FF 1, 2). A large store of information does not require a computer; it may merely be a collection of filed papers or data residing in the human mind.

"[A]fter Alice, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. The bare fact that a computer exists in the physical rather than purely conceptual realm is beside the point." *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014).

Nothing in claim 26 purports to improve computer functioning or "effect an improvement in any other technology or technical field." *Alice*, 134 S.Ct. at 2359. Nor do claims solve a problem unique to the Internet. *See DDR Holdings*, 773 F.3d at 1257. The claims also are not adequately tied to "a particular machine or apparatus." *Bilski v. Kappos*, 561 U.S. 593, 601 (2010).

We are also unpersuaded by Appellant's arguments directed to step 2 of the *Alice* analysis, that the claims recite "significantly more than the determining an action to handle a trouble ticket," and "provide a technological advantage in the form of simple and efficient handling of tickets affecting a large number of clients, where each of the clients can have

custom requirements for handling the ticket." Reply Br. 4. The claims merely implement a process to compare received and stored data to determine correlations and differences, and select steps from the stored data that are then communicated, all functions offered by any general purpose computer for accessing, comparing, and communicating data.

We find no meaningful distinction between independent method claim 26, independent system claims 38 and 46, and independent medium claim 54; the claims all are directed to the same underlying abstract idea. All dependent claims merely further refine the nature of the stored or processed data, or add additional data manipulation steps. Because claims 26–54 are directed to an abstract idea, and nothing in the claims adds an inventive concept, the claims are not patent-eligible under U.S.C. § 101. Therefore, we sustain the Examiner's rejection of claims 26–54 under 35 U.S.C. § 101.

Rejection under 35 U.S.C. § 103(a)

Initially, we note that the Appellant argues independent claims 26, 38, 46, and 54 together as a group. (Appeal Br. 14–15). Correspondingly, we select representative claim 26 to decide the appeal of these claims, with remaining claims 38, 46, and 54 standing or falling with claim 26. Appellant does not provide a substantive argument as to the separate patentability of claims 27–37 that depend from claim 26, claims 39–45 that depend from claim 38, and claims 47–53 that depend from claim 46. Thus claims 27–54 stand or fall with claim 26. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We begin by construing a number of claim terms. During prosecution the PTO gives claims their "broadest reasonable interpretation consistent with the [S]pecification." *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

Claim 26 recites "a ticket object," "a service contract object," "an attribute map," "a mapped SLA," and "an attached SLA object." Each of these "objects" are arrangements of data elements relative to each other, in that they encompass data elements in each "object," thus, defining an arrangement of data that establishes relationships between particular defined data elements. (FF 3–10). The particular data elements that are part of a "service contract object," "attribute map," or "attached SLA object" are not defined or otherwise limited by the Specification or claims, because examples of what they "may" include are provided, without any limitations of what is excluded or what is required. Each object, thus, is an undefined arrangement of data, in data elements or fields, within a larger collection of data.

The claims begin with a "ticket object," which identifies a reported problem in a "trouble ticket." Each trouble ticket is correlated with an affected support level agreement (SLA) for various organizations that entered into the SLA. Next, the claims make a series of determinations of which data elements in certain objects are associated with, relate to, or correspond with, data elements in other objects, ultimately "generating" data that ultimately identifies those determined data elements. The claims require two clients, each of which has a separate SLA, where each SLA shares a data element between the SLA's that indicates a "priority level."

In addition, the claims also recite very broad language in describing the relationships that are determined: associated with, relate to, or correspond with. The claims do not set forth guidelines for association, relatedness, or correspondence. For example, claim 26 recites determining "an attribute map associated with a service contract object," but does not

limit the nature of the association. The ways the data is "associated," thus, could be any association, such as being on the same network of computers, or in the same state or language. The claim determines if one object "relates to" another, and "corresponds to" another, without specifying the relationship or correspondence, so any relationship or correspondence meets the claim language, such as being in the same database.

Appellant argues that the cited prior art does not disclose the "distinct elements," or the specific "components," of the claimed "attribute map" and the "distinct database object" of the "attached SLA object." (Appeal Br. 11–13). For example, Appellant argues the "computer service information of Chen cannot be both the service contract object and the mapped SLA of Appellant's claims." (Appeal Br. 12). Appellant also argues the cited art fails to disclose "the specific series of correlations recited in Appellant's claims." (Reply Br. 5–6).

We are not persuaded by Appellant's arguments.

In claim 26, the result of data fed into the determinations is to identify two different actions to take, which are then communicated. Chen discloses a database that stores data, and relationships of data, that is used (FF 11), and Childress discloses using data and relationships to identify and communicate corrective actions to take for a trouble incident (FF 12, 13), thus, generally meeting the broad claim language. Although the claims recite "objects" that place the related data in broadly-defined separate containers of data, Chen discloses an equivalent way of associating the same data within a relational database. The ordinary artisan would understand that separate tables, sub-tables, rows and columns of related data accomplishes the same thing as data that is grouped into "objects." (*See* FF

11, 14). The claimed "attribute map," "service contract object," and "mapped SLA" are each separate arrangements of data within the Childress database that are retrieved through queries. (FF 11, 12, 15).

In addition, because the "attribute map" and "attached SLA object" are not in any way defined or limited as to data content, Appellant's arguments, that the cited art does not disclose the claimed "attribute map" and generating an "attached SLA object," amount to no more than asserting that Appellant's broad, undefined claim terms are not explicitly disclosed in the cited art. (Appeal Br. 11–13; *see also* Reply Br. 5–6). This is not persuasive, because the specific claim terms recited need not be found verbatim in the prior art. *See In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (a reference does not have to satisfy an *ipsissimis verbis* test to disclose a claimed element). Childress discloses data in the database, but does not group elements of data and assign them the same names as in the claims.

Furthermore, establishing data elements, and establishing that data elements may relate to each other, are basic features of the types of relational databases disclosed by Chen. (FF 11). How relationships of particular data elements may be further subdivided by "objects" is merely an implementation detail, because there are many ways to arrange generic data elements and their relationships within modern databases, so that the data may be compared and extracted. Appellant also recognizes that other "equivalent" options for arranging data are available. (FF 14). As we noted above, there is no limit on what data is encompassed by the "service contract object," "attribute map," or "attached SLA object," and no limit on how data

elements may be associated with, related to, or correspond with other data elements.

Appellant further argues Chen's disclosure "to generate an OVO MSI message that has been enriched or otherwise modified with computer service information" does not disclose "generating an attached SLA object," because Chen's message containing new information is not a "distinct database object." (Appeal Br. 13; *see also* Reply Br. 6–7). We are not persuaded by Appellant's argument, because the claim does not require a "distinct database object," but instead only requires "generating" an "object," which, as we noted above, is merely a collection of data. Chen's message contains new information, and the information is a collection of data, so Chen generates a new object, as claimed, which meets the broad claim language. (FF 15).

Appellant argues the cited references fail to disclose claim 26's "shared reference of the ticket object, the shared reference indicating a priority level applicable to both the first SLA and the second SLA." (Appeal Br. 14–15; *see also* Reply Br. 7). We are unpersuaded by Appellant's argument.

A "shared reference" is not defined, but is described as a common data field. (FF 16, 17). Consistent with Appellant's Specification, we construe the language to be that two SLA's have a field that both contain data describing a priority level. (*Id.*). Although the Specification describes an example where the *value* of data in the shared reference field is "high priority" for two SLA's, the claim merely requires that both SLA's have a stored data field (a "shared reference") which represents priority, but not that the value of the data stored in that field matches in two instances of the

"shared reference." The Specification, for example, does not define the value of the data, but merely provides a non-limiting example where the data *value* matches. (FF 17). We, therefore, find the claim recites that each SLA has a "priority" field.

Childress discloses an example where two customers have trouble that are reported as being at different priorities. (FF 18, 19). Childress, thus, meets the claim language because each of the SLAs disclosed have a data field representing priority of handing problems. The ordinary artisan would also recognize that although Childress discloses a situation where a *value* of data for each SLA's priority may be different, because it is just an example, there would be situations where the *value* of the priority field for two SLAs is the same. In that situation, however, because SLAs cover different customers, which the ordinary artisan would have understood, at times, involves different components affected by the trouble ticket, the ordinary artisan would also have understood that the actions taken would, at times, be different. This meets the claim language of "wherein the second SLA handles the priority level differently than the first SLA."

For these reasons, we affirm the rejection of claims 26–54 under 35 U.S.C. § 103(a).

CONCLUSIONS OF LAW

The Examiner did not err in rejecting claims 26–54 under 35 U.S.C. § 101.

The Examiner did not err in rejecting claims 26–54 under 35 U.S.C. § 103(a).

DECISION

For the above reasons, the Examiner's rejections of claims 26–54 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED